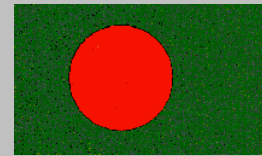


# Bangladesh

Dipal C. Barua



Unelectrified population = 84%  
(i.e., 109 million out of 130 million)

## Renewable Energy Program

- **Solar Program** - marketing solar home systems through a network of unit offices with a soft-loan program
- **Wind Program** - distributing electricity for development of microenterprises in coastal areas of Bangladesh
- **Biogas Program** - promoting biogas to produce cooking fuel and fertilizer
- **Training Program** - creating employment for rural people and a base of necessary skills
- **R&D Program** - exploring appropriate technologies, marketing and financing mechanisms, local manufacturer of components

## Solar Project of Grameen Shakti

- Grameen Shakti's (GS) principal program is its solar project.
- In June 1996, GS started its program to popularize solar home systems (SHSs) in rural Bangladesh.
- GS sells the SHSs on credit. The customer has to pay 15% of the total system price as a down payment; the rest is paid in 36 installments with a 12% service charge.
- GS is selling SHSs in 10 districts through 25 unit offices. Each unit office has a manager/engineer who is responsible for selling, installing, and maintaining the systems. The manager also collects the monthly installment and visits houses to check the systems and sign the maintenance card.
- Through August 2000, GS sold 3,017 SHSs with an installed capacity of 148.5 kWp.



*Solar system installed in a rural household*



*A 1.5-kW wind turbine installed in coastal area of Bangladesh*

## Wind Program of Grameen Shakti

- Grameen Shakti has installed four wind turbines as a pilot project in order to study the feasibility of wind-energy application in Bangladesh.
- In 1998, GS installed four wind/diesel hybrid systems in coastal areas.
- Three of these systems are 1.5 kW and one is 10 kW.
- The objective of installing these turbines is to provide electricity to people to start microenterprises and to enhance their profit by increasing production.
- Electricity produced by wind turbines is used to provide electricity for lighting homes.
- The electricity is also used for lighting, pumping water, and powering incubators.